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10/643,422	08/19/2003	Katsuaki Tanaka	P 0305422 H7959US	4553

7590 05/14/2007	**EXAMINER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No.	Applicant(s)
	10/643,422	TANAKA ET AL.
	Examiner	Art Unit
	Kim-Kwok CHU	2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 2/21/2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16,20-22,26-36 and 40-44* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-4 and 13-16* is/are allowed.

6)☒ Claim(s) *5-12,20-22,26-36 and 40-42* is/are rejected.

7)☒ Claim(s) *43 and 44* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)	4)☐ Interview Summary (PTO-413)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3)☐ Information Disclosure Statement(s) (PTO/SB/08)	5)☐ Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6)☐ Other: _____.

Response to Remarks

1.   Applicant's Amendment and Remarks filed on February 21, 2007 have been fully considered. With respect to the amended Claim 5, the newly added limitation "which is connected to the sound recording/reproducing apparatus" does not overcome the prior art rejection. In a sound recording/reproducing apparatus such as the prior art of Heredia's, an amplifier is inherently connected/included in the apparatus. For example, the prior art of Heredia's audio subsystem 22 as illustrated in Fig. 1 includes a DSP 58 and sound signal processing means 52, 54 and 56 which are integrated with signal amplifiers means as claimed in Applicant's Claim 5.

Similarly, independent Claims 9, 20, 26, 29, 33 and 40 with the newly added limitation "which is connected to the sound recording/reproducing apparatus" does not overcome the prior art rejection.

Claim Objections

2.   Claim 26 is objected to because of the following

informality:

(a)   in Claim 26, lines 3 and 6, there are two "a recorded

level detection section". Applicant should clarify whether or

not they are the same detection section.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs

of 35 U.S.C. § 102 that form the basis for the rejections under

this section made in this Office action:

> *A person shall be entitled to a patent unless –*
> *(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

4.   Claims 5-8, 9-12, 20-22, 26-36 and 40-42 are rejected

under 35 U.S.C. § 102(e) as being anticipated by Heredia et al.

(U.S. Patent 7,065,287).

5.   Heredia teaches a sound recording/reproducing method in a

sound recording/reproducing apparatus for recording sound data

onto a recording medium and reproducing the sound data from the

record recording medium having all the steps as recited in

claims 5-12 and 29-36. For example, Heredia teaches the

following:

(a) With respect to Claim 5, an attribute information

(database) recording step of recording, onto a recording medium

30, attribute information (database) on sound data of a music

piece that are to be recorded onto the recording medium 30

(Figs. 1, 3A and 4; column 6, lines 17-20); a rule table

creation step of creating a rule table (audio formats) that

associates the attribute information (database), digital signal

processor/DSP program parameters (audio controls such as coding

and decoding process) each designating, to a digital signal

processor 58 of an amplifier apparatus, a sound field process

or frequency characteristic process to be performed (Figs. 1

and 3A; column 6, lines 35-48; various audio formats such as

MP3, MPEG-2 respective to each audio file is a rule table which

controls the DSP parameters) and processing start times (audio

file sequence) each designating a time (playback order) when

the process is to be started; a DSP program parameter

(decoding) acquisition step of, at a time of reproduction when

sound data of a music piece to be reproduced, read out from the

recording medium 30, are to be outputted to the amplifier

apparatus 54, 52, 56 which is currently connected to the sound

recording/reproducing apparatus, acquiring, from the recording

medium 30, the attribute information on the sound data of the

music piece to be reproduced and acquiring, from the rule
table, any of the DSP program parameters that corresponds to
the attribute information (Figs. 1 and 3A; audio is reproduced
based on its title and format from the database); and a DSP
program parameter setting step of setting the DSP program
parameter (decoding the audio formats such as MP3, AM, FM,
SPDIF and MPEG-2 etc.), acquired from the rule table, in the
digital signal processor of the amplifier apparatus currently
connected to the sound recording/reproducing apparatus (Fig.
1).

(b) With respect to Claim 6, when a change (different
audio formats) has been made to the sound field process or
frequency characteristic process of the amplifier apparatus 54,
52, 58 during reproduction of the sound data of the music
piece, there is performed a learning (reconfiguring) of
registering (updating database) in the rule table, a DSP
program parameter (audio format) indicative of the changed
sound field process or frequency characteristic process in
association with the attribute information of the sound data
being currently reproduced (Figs. 1, 3A and 6H; audio file
format can be displayed in the CD Guide as illustrated in Fig.
6H).

(c) With respect to Claim 7, the attribute information
(database) on the sound data of the music piece includes music

piece information identifying the music piece, album

information identifying an album to which the music piece

belongs, artist information identifying an artist of the music

piece, and genre information identifying a musical genre of the

music piece (Figs. 3A and 3B).

(d)   With respect to Claim 8, the attribute information

(database) on the sound data of the music piece includes

compression scheme (MP3, MPEG-2) information indicative of a

compression scheme with which the sound data are recorded on

the recording medium (Figs. 3A and 3B).

6.   Apparatus claims 9-12 are drawn to the apparatus

corresponding to the method of using same as claimed in claims

5-8.   Therefore apparatus claims 9-12 correspond to method

claims 5-8, and are rejected for the same reasons of

anticipation as used above.   Claim 9 however also recites the

following limitations which are taught by the prior art of

Heredia:

(a)   with respect to Claim 9, the amplifier acquires the

attribute information of sound data of a music piece to be

reproduced and corresponds to a process start time which

coincides with an elapsed reproducing time of the sound data

(Fig. 1; DSP starts signal processing when sound data is being

reproduced as a sound decoding operation).

7.   Apparatus claims 29-32 are drawn to the apparatus corresponding to the method of using same as claimed in claims 5-8.   Therefore apparatus claims 29-32 correspond to method claims 5-8, and are rejected for the same reasons of anticipation as used above.   Claim 29 however also recites the following limitations which are taught by the prior art of Heredia:

(a)   with respect to Claim 29, the amplifier acquires the attribute information of sound data of a music piece to be reproduced and corresponds to a process start time which coincides with an elapsed reproducing time of the sound data (Fig. 1; DSP starts signal processing when sound data is being reproduced as a sound decoding operation).

8.   Apparatus claims 33-36 are drawn to the apparatus corresponding to the method of using same as claimed in claims 5-9.   Therefore apparatus claims 29-32 correspond to method claims 5-9, and are rejected for the same reasons of anticipation as used above.   Claim 33 however also recites the following limitations which are taught by the prior art of Heredia:

(a)   With respect to Claim 33, a recording medium 30 on which sound data can be recorded and reproduced (Fig. 1); and the DSP parameters correspond to any one of the processing start times that has coincided with an elapsed (file length) reproducing time of the sound data (Figs. 3A and 3B; playlist and file length are associated to each audio format stored in the database).

9.   Heredia teaches a sound recording/reproducing method in a sound recording/reproducing apparatus for recording sound data onto a recording medium and reproducing the sound data from the recording medium having all the steps as recited in claims 20-22.   For example, Heredia teaches the following:

(a)   With respect to Claim 20, a recorded level (audio parameters) recording step of, when a succession (playlist) of sound data (audio files) are to be recorded onto the recording medium 30, detecting a recorded level (audio parameters) of the succession of the sound data and recording, onto the recording medium 30, the detected recorded level in association with the succession of the sound data (Figs. 3A and 3B); a volume control step of, when sound data read out from the recording medium 30 are to be output to an amplifier apparatus 22 which is currently connected to the sound recording/reproducing apparatus having a volume control 150, 152, 164 being controlled from outside (Fig. 2B), acquiring a recorded level (audio parameters) corresponding to a succession of the sound data to be reproduced and controlling the volume control of the amplifier apparatus currently connected to the sound recording/reproducing apparatus on the basis of the acquired recorded level and a reference recorded level (Fig. 1; audio is processed based on its audio parameters).

(b)   With respect to Claim 21, a predetermined value

(audio parameters such as amplification gain) is set as the reference recorded level.

(c) With respect to Claim 22, the reference recorded level (gain) is determined on the basis of a plurality of recorded levels corresponding to a plurality of successions of sound data to be reproduced (Fig. 1; reference gain is the predetermined gain used in the audio subsystem 22).

10. Heredia teaches a sound recording/reproducing method having all the steps as recited in claims 26-28 and 40-42. For example, Heredia teaches the following:

(a) With respect to Claim 26, a recording medium 30 on which sound data can be recorded and reproduced (Fig. 1; column 5, lines 65-67); a recorded level (format) detection section that, when a succession (selected files) of sound data are to be recorded onto the recording medium 30, detects a recorded level of the succession of the sound data (Fig. 1; multimedia files in form of a database are stored in the medium 30); the recorded level detection section that records the recorded level, detected by the recorded level detection section, onto the recording medium 30 in association with the succession of the sound data (Fig. 1; selected audio files and its format are stored); and a recorded level acquisition section (audio processing) that, at a time of reproduction when sound data

read out from the recording medium 30 are to be outputted to an
amplifier apparatus 22 which is currently connected to the
sound recording/reproducing apparatus having a volume control
150, 152, 164 (Fig. 2b) being controlled from outside, acquires
a recorded level (format) corresponding to a succession of the
sound data to be reproduced (Fig. 1; audio files with various
formats are being processing/decoding); an output level control
section 150, 152, 164 that controls the volume control of the
amplifier apparatus currently connected to the sound
recording/reproducing apparatus on the basis of the acquired
recorded level and a reference recorded level (Figs. 1 and 2b).

(b)   With respect to Claim 27, a predetermined value
(audio parameters such as amplification gain) is set as the
reference recorded level.

(c)   With respect to Claim 28, the reference recorded
level (gain) is determined on the basis of a plurality of
recorded levels corresponding to a plurality of successions of
sound data to be reproduced (Fig. 1; reference gain is the
predetermined gain used in the audio subsystem 22).

11.   Claims 40-42 have limitations similar to those treated in
the above rejection, and are met by the reference as discussed
above as cited in Claims 26-28.   Claim 40 however also recites
the following limitations which are taught by the prior art of
Heredia:

(a)   With respect to Claim 40, a volume control section
150, 152, 164 that controls the volume control of the amplifier
apparatus on the basis of acquired recorded level and a
reference recorded level (Fig. 2B).

Allowable Subject Matter

12.   Claims 1-4 and 13-16 are allowable over prior art.

13.   Claims 43 and 44 are objected to as being dependent upon a
rejected base claim, but would be allowable if rewritten in
independent form including all of the limitations of the base
claim and any intervening claims.

14.   The following is an Examiner's statement of reasons for
the indication of allowable subject matter:
As in claim 1, the prior art of record fails to teach or fairly
suggest a sound recording/reproducing method in a sound
recording/reproducing apparatus for recording sound data onto a

recording medium and reproducing the sound data from the

recording medium having the following features:

(a)   a DSP program parameter acquisition step of, at a time

of reproduction when sound data of a music piece to be

reproduced, read out from the recording medium, are to be

outputted to the amplifier apparatus that is currently

connected to the sound recording/reproducing apparatus,

acquiring, from the recording medium, the attribute information

on the sound data of the music piece to be reproduced and

acquiring, from the rule table, any of the DSP program

parameters that corresponds to the attribute information;

(b) a step of using, when a model of an amplifier

apparatus that is the object of control during creation of the

rule table and a model of the amplifier apparatus that is

currently connected to the sound recording/reproducing

apparatus coincide with each other, the DSP program parameter

acquired from the rule table as a DSP program

parameter after completion of the acquisition process;

(c) a step of using, when the model of an amplifier

apparatus that is the object of control during creation of the

rule table differs from the model of the amplifier apparatus

that is currently connected to the sound recording/reproducing

apparatus, a DSP program parameter acquired from the rule table

and a DSP program parameter corresponding to the amplifier

apparatus that is currently connected to the sound

recording/reproducing apparatus from a DSP program associating

table that associates DSP program parameters of a plurality of

amplifier apparatuses, and using the DSP program parameter

acquired from the DSP program associating table as a DSP

program parameter after completion of the acquisition process;

and

(d)   a DSP program parameter setting step of setting the

DSP program parameter after completion of the acquisition step,

in the digital signal processor of the amplifier apparatus that

is currently connected to the sound recording/reproducing

apparatus.

As in claims 13, 43 and 44, the prior art of record fails

to teach or fairly suggest a sound recording/reproducing method

in a sound

recording/reproducing apparatus for recording sound data onto a

recording medium and reproducing the sound data from the

recording medium having the following features:

(a)   a DSP program parameter acquisition section that, at

a time of reproduction when sound data of a music piece to be

reproduced, read out from the recording medium, are to be

outputted to the amplifier apparatus which is currently

connected to the sound recording/reproducing apparatus,

acquires, from the recording medium attribute information of

sound data to be reproduced and acquires, from the rule table,

any of the DSP program parameters that corresponds to the

attribute information on the sound data

(b)   a section that uses, when a model of an amplifier

apparatus, that is the object of control during creation of the

rule table and a model of the amplifier apparatus that is

currently connected to the sound recording/reproducing

apparatus coincide with each other, the DSP program parameter

acquired from the rule table as a DSP program parameter after

completion of the acquisition process;

(c)   a DSP program associating table associating DSP

program parameters of a plurality of amplifier apparatus;

a section that acquires, when the model of an amplifier

apparatus that is the object of control during creation of the

rule table differs from the model of the amplifier apparatus

that is currently connected to the sound recording/reproducing

apparatus, a DSP program parameter corresponding to the

amplifier apparatus that is currently connected to the sound

recording/reproducing apparatus from the DSP program

associating table, and uses the DSP program associating table

as a DSP program parameter after completion of the acquisition

process; and

(d)   a DSP program parameter setting section that sets

the DSP program parameter after completion of the acquisition

process, acquired from the rule table, in the digital signal

processor of the amplifier apparatus currently connected to the

sound recording/reproducing apparatus.

The features indicated above, in combination with the

other elements of the claims, are not anticipated by, nor made

obvious over, the prior art of record.

15. THIS ACTION IS MADE FINAL. Applicant is reminded of the
extension of time policy as set forth in 37 CFR 1.136(a).
A shortened statutory period for reply to this final action is
set to expire THREE MONTHS from the mailing date of this
action. In the event a first reply is filed within TWO MONTHS
of the mailing date of this final action and the advisory
action is not mailed until after the end of the THREE-MONTH
shortened statutory period, then the shortened statutory period
will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated
from the mailing date of the advisory action. In no event,
however, will the statutory period for reply expire later than
SIX MONTHS from the mailing date of this final action

16.   Any inquiry concerning this communication or earlier
communication from the examiner should be directed to Kim CHU
whose telephone number is (571) 272-7585 between 9:30 am to
6:00 pm, Monday to Friday.

     If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Andrea Wellington, can
be reached on (571) 272-4483.

     The fax number for the organization where this application
or proceeding is assigned is (571) 273-8300.

     Information regarding the status of an application may be
obtained from the Patent Application Information Retrieval
(PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished application is available
through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have
questions on access to the Private PAIR system, contact the
Electronic Business Center (EBC) at 866-217-9191 (toll free).

Kim-Kwok CHU

Examiner AU2627
May 9, 2007
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ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER